

Title (en)

TEM resonator system especially for use in an MRI system

Title (de)

TEM-Resonatorsystem, insbesondere zur Verwendung in einem MRI-System

Title (fr)

Système de résonateur TEM destiné notamment à être utilisé dans un système IRM

Publication

EP 2672286 A1 20131211 (EN)

Application

EP 12170785 A 20120605

Priority

EP 12170785 A 20120605

Abstract (en)

A TEM resonator system is disclosed comprising at least two TEM resonators (21,31; 22, 32), especially in the form of TEM volume coils, and especially for use in an MR imaging system or apparatus for transmitting RF excitation signals and/or for receiving MR signals into/from an examination object or a part thereof, respectively, wherein the TEM resonators are arranged and displaced along a common longitudinal axis and wherein an intermediate RF shield (4) is positioned in longitudinal direction between the two TEM resonators for at least substantially preventing electromagnetic radiation from emanating from between the first TEM resonator and the second TEM resonator into the surroundings. A PET detector and/or another supplementary element can be placed in the volume between the two TEM resonators.

IPC 8 full level

G01R 33/422 (2006.01); **G01R 33/48** (2006.01)

CPC (source: EP US)

G01R 33/34076 (2013.01 - US); **G01R 33/3456** (2013.01 - US); **G01R 33/422** (2013.01 - EP US); **G01R 33/481** (2013.01 - EP US); **G01R 33/3453** (2013.01 - EP US); **G01R 33/56563** (2013.01 - EP US); **G01R 33/5659** (2013.01 - EP US)

Citation (applicant)

WO 2008037636 A1 20080403 - SIEMENS AG [DE], et al

Citation (search report)

- [YD] WO 2008037636 A1 20080403 - SIEMENS AG [DE], et al
- [Y] US 2009206836 A1 20090820 - EBERLER LUDWIG [DE], et al
- [Y] US 6060883 A 20000509 - KNUETTEL BERTOLD [DE]
- [Y] US 2007132454 A1 20070614 - VAUGHAN JOHN T [US]
- [A] WO 2009004521 A2 20090108 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [A] WO 2010095063 A1 20100826 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [A] JP 2011056164 A 20110324 - NATL INST RADIOLOGICAL SCIENCE

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2672286 A1 20131211; BR 112014030096 A2 20170627; CN 104350390 A 20150211; CN 104350390 B 20170825; EP 2856194 A1 20150408; EP 2856194 B1 20210901; JP 2015518764 A 20150706; JP 6255012 B2 20171227; RU 2014154065 A 20160810; US 10241163 B2 20190326; US 2015130466 A1 20150514; WO 2013182926 A1 20131212

DOCDB simple family (application)

EP 12170785 A 20120605; BR 112014030096 A 20130514; CN 201380029851 A 20130514; EP 13730360 A 20130514; IB 2013053921 W 20130514; JP 2015515603 A 20130514; RU 2014154065 A 20130514; US 201314405298 A 20130514